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Status	Finished
Started	Monday, 23 September 2024, 5:00 PM
Completed	Monday, 23 September 2024, 5:21 PM
Duration	20 mins 17 secs

Question 1

Correct

Marked out of 5.00

You have recently seen a motivational sports movie and want to start exercising regularly. Your coach tells you that it is important to get up early in the morning to exercise. She sets up a schedule for you:

On weekdays (Monday - Friday), you have to get up at 5:00. On weekends (Saturday & Sunday), you can wake up at 6:00. However, if you are on vacation, then you can get up at 7:00 on weekdays and 9:00 on weekends.

Write a program to print the time you should get up.

Input Format

Input containing an integer and a boolean value.

The integer tells you the day it is (1-Sunday, 2-Monday, 3-Tuesday, 4-Wednesday, 5-Thursday, 6-Friday, 7-Saturday). The boolean is true if you are on vacation and false if you're not on vacation.

You have to print the time you should get up.

Example Input:

1 false

Output:

6:00

Example Input:

5 false

Output:

5:00

Example Input:

1 true

Output:

9:00

For example:

Input	Result
1 false	6:00
5 false	5:00
1 true	9:00

Answer: (penalty regime: 0 %)

```
1 import java.util. Scanner;
2 public class WakeUpTime {
3     public static void main(String[] args) {
4         Scanner scanner = new Scanner(System.in);
5         int day = scanner.nextInt();
6         boolean onVacation = scanner.nextBoolean();
7         String wakeUpTime;
8         if (onVacation) {
9             if (day == 1 || day == 7) {
10                 wakeUpTime = "9:00";
11             }
12             else {
13                 wakeUpTime = "7:00";
14             }
15         }
16         else {
17             if (day == 1 || day == 7) {
18                 wakeUpTime = "6:00";
19             } else {
20                 wakeUpTime = "5:00";
21             }
22         }
23         System.out.println(wakeUpTime);
24     }
25 }
```

```
24 scanner.close();
25 }
26 }
```

	Input	Expected	Got	
✓	1 false	6:00	6:00	✓
✓	5 false	5:00	5:00	✓
✓	1 true	9:00	9:00	✓

Passed all tests! ✓

//

Question 2

Correct

Marked out of 5.00

Write a program that takes as parameter an integer n.

You have to print the number of zeros at the end of the factorial of n.

For example, $3! = 6$. The number of zeros are 0. $5! = 120$. The number of zeros at the end are 1.

Note: $n! < 10^5$

Example Input:

3

Output:

0

Example Input:

60

Output:

14

Example Input:

100

Output:

24

Example Input:

1024

Output:

253

For example:

Input	Result
3	0
60	14
100	24
1024	253

Answer: (penalty regime: 0 %)

Reset answer

```
1 import java.util.Scanner;
2
3 public class puttu {
4
5     public static int Zeros(int n) {
6         int count = 0;
7
8         for (int i = 5; n / i >= 1; i *= 5) {
9             count += n / i;
10        }
11        return count;
12    }
13
14    public static void main(String[] args) {
15        Scanner scanner = new Scanner(System.in);
16        int n = scanner.nextInt();
17        int result = Zeros(n);
18        System.out.println(result);
19    }
20 }
```

	Input	Expected	Got	
✓	3	0	0	✓
✓	60	14	14	✓
✓	100	24	24	✓
✓	1024	253	253	✓

Passed all tests! ✓

Question 3

Correct

Marked out of 5.00

Consider a sequence of the form 0, 1, 1, 2, 4, 7, 13, 24, 44, 81, 149...

Write a method program which takes as parameter an integer n and prints the nth term of the above sequence. The nth term will fit in an integer value.

Example Input:

5

Output:

4

Example Input:

8

Output:

24

Example Input:

11

Output:

149

For example:

Input	Result
5	4
8	24
11	149

Answer: (penalty regime: 0 %)

```

1 import java.util.Scanner;
2 public class SequenceNthterm{
3     public static void main(String[] args){
4         Scanner scanner = new Scanner(System.in);
5
6         int n = scanner.nextInt();
7         System.out.println(nthterm(n));
8         scanner.close();
9     }
10    static int nthterm(int n){
11        if (n == 0) return 0;
12        if (n == 2 || n == 3) return 1;
13        int[] seq = new int[n+1];
14        seq[1]=0;
15        seq[2]=1;
16        seq[3]=1;
17        for(int i=3;i <= n;i++){
18            seq[i]=seq[i-1]+seq[i-2]+seq[i-3];
19        }
20        return seq[n];
21    }
22 }
23
24 }
```

	Input	Expected	Got	
✓	5	4	4	✓

	Input	Expected	Got	
✓	8	24	24	✓
✓	11	149	149	✓

Passed all tests! ✓

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